Abstract

An 802.11 source station transmits a signal with the duration field other than that required for the transmission to prevent transmission by other stations during known sequences. Thus, the source station uses the duration field to spoof the actual time the medium will be occupied, to stations within range of the signal. A station within range of the transmitted signal will check the duration field of the transmitted signal, and update the station's network allocation vector. Thus, the station will not transmit because the station's network allocation vector indicates that the medium is in use, even though the station maybe unable to hear the carrier. Accordingly, spoofed stations may, for example, 1) delay transmission until a more critical transmission has completed, 2) allow unknown or foreign protocol to have preferential use of the medium, 3) prevent interference from hidden stations, and 4) allow sharing of the medium by overlapping basic service sets.